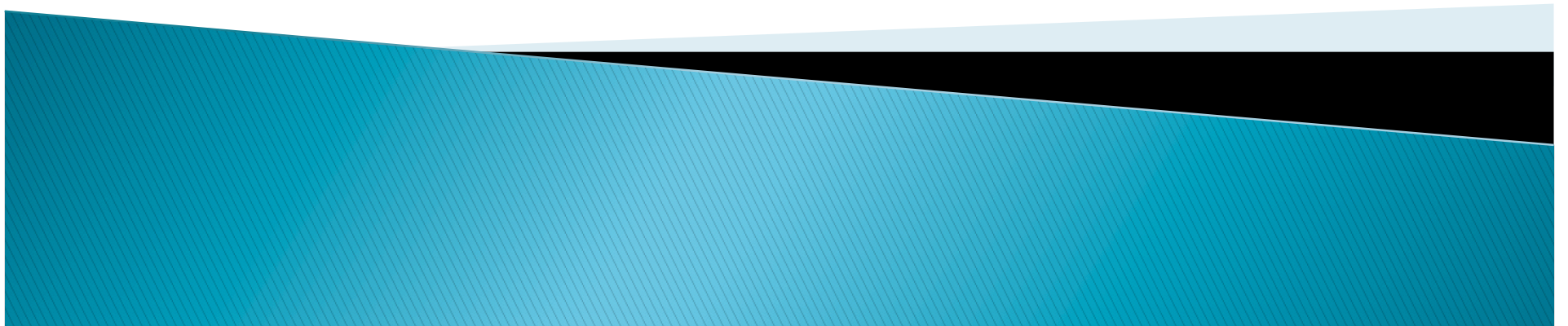


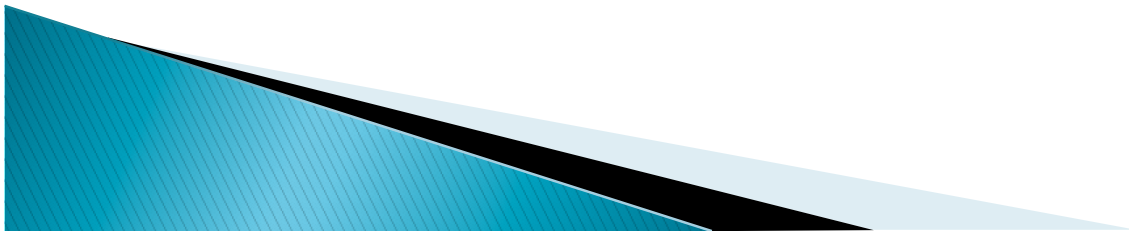
# Tobacco, Alcohol & Drugs

Mr. Vecchio  
Health  
2012



# Pretest Questions

- ▶ 1.) If you smoke cigarettes your risk of cardiovascular disease increases.
- ▶ 2.) Name two effects of smoking on your cardiovascular system?
- ▶ 3.) What is the addictive ingredient in tobacco?
- ▶ 4.) Smoking can cause blood vessels to dilate.
- ▶ 5.) Over the last 10 years, teen smoking rates have decreased.



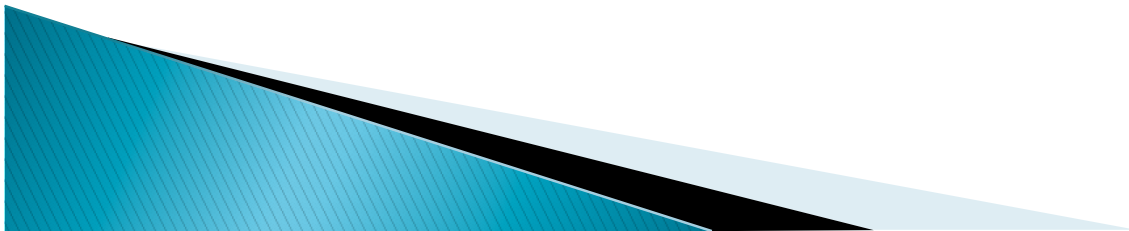
# The Effects of Tobacco

- ▶ #1 Cause of *preventable* death in the U.S.  
(400,000 early deaths/year)
- ▶ Addictive Drug–
- ▶ Carcinogen–
- ▶ \_\_\_\_\_of smokers try 1<sup>st</sup> cigarette by age 18



# Nicotine

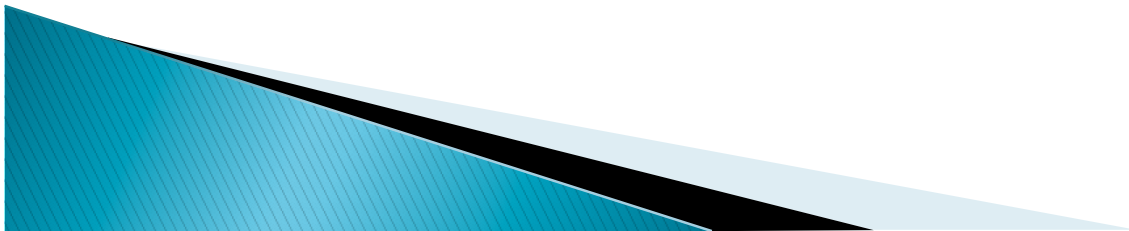
- ▶ Stimulant–
- ▶ Constricts blood vessels → Elevates blood pressure
- ▶ Antidiuretic–





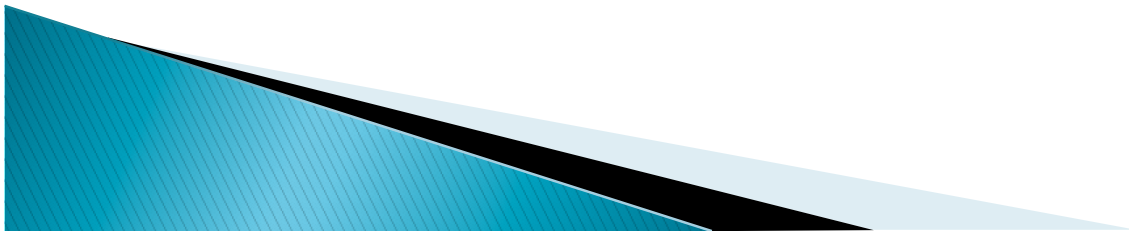
# Health Effects–short

- ▶ Dulled taste buds
- ▶ Bad breath, smelly clothes
- ▶ Brain chemistry

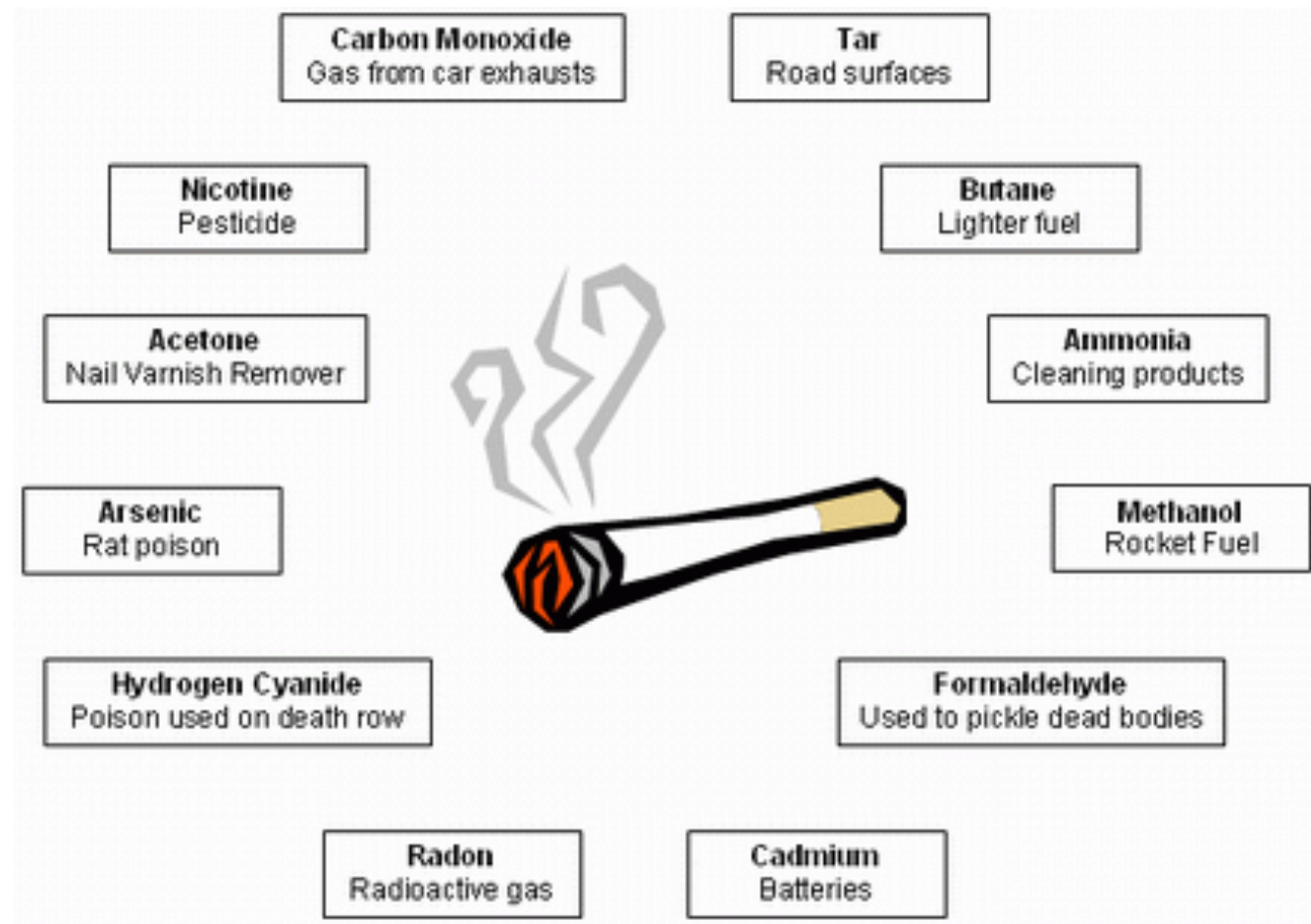


# Health Effects–long

- ▶ Emphysema–
- ▶ Lung Cancer, Heart Disease, Stroke=3X greater
- ▶ Damage to the cilia in the bronchi (allows tar to build up)

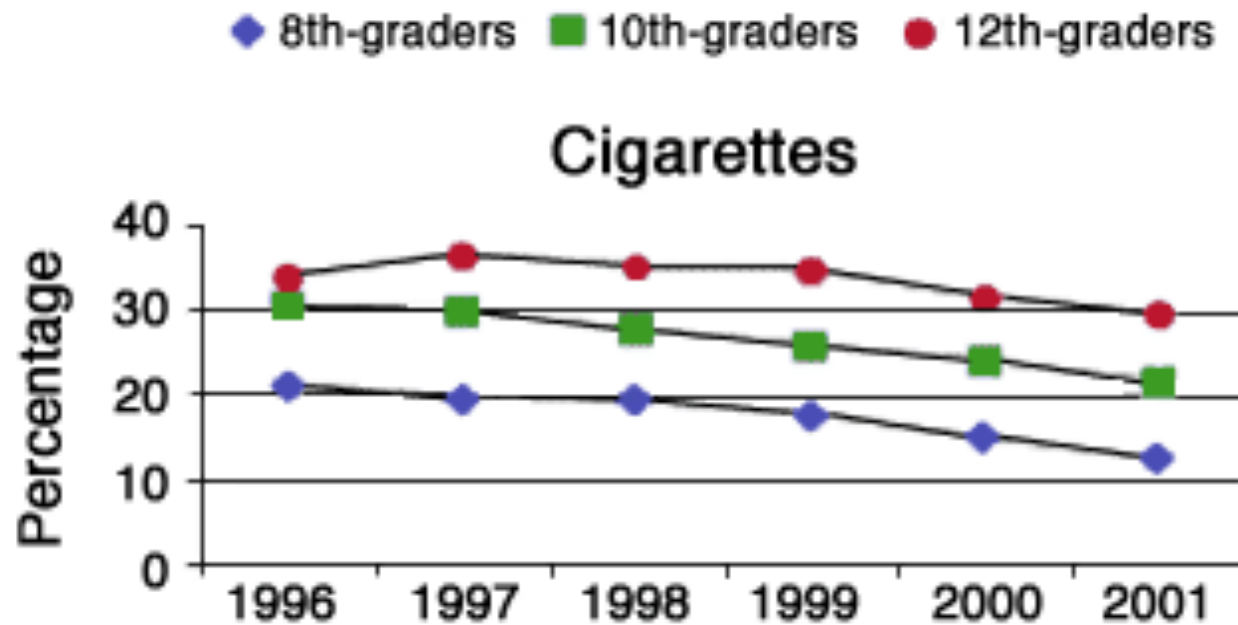


# What's in a cigarette??



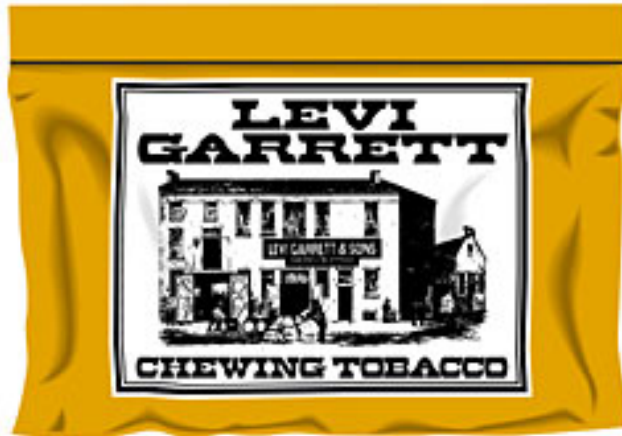
# Daily Smoking Chart

## Trends in Past-Month Use of Cigarettes



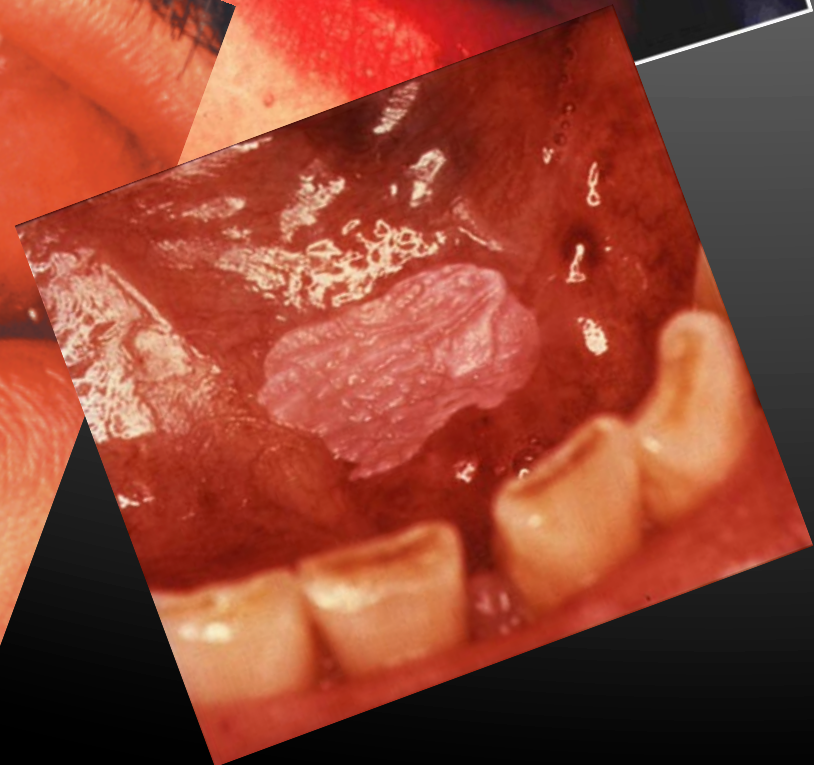
# Smokeless Tobacco

- ▶ Chew and Snuff (ads banned from radio and TV)
- ▶ -----
- ▶ Leukoplakia–



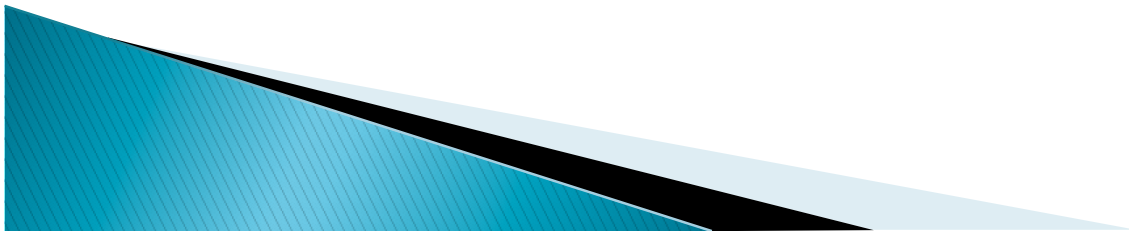


# Smokeless Tobacco



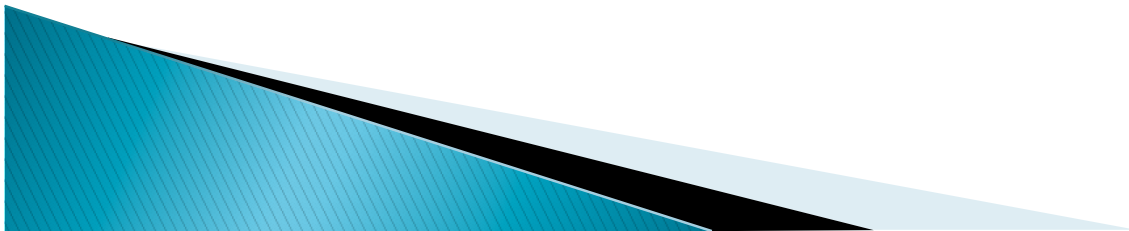
# 2007 Youth Survey

- ▶ Peers #1 influence
- ▶ Family members who smoke have children 3X more likely to smoke
- ▶ Appear mature, desirable, social calling



# Quitting

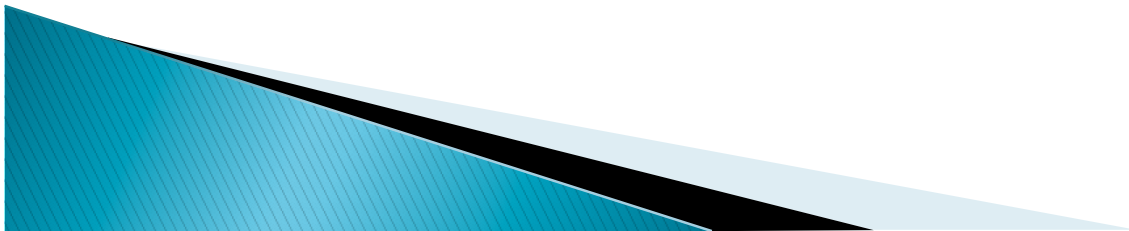
- ▶ Set a day and replace it with another activity (exercise)
- ▶ Choose supportive friends, set realistic time goals
- ▶ Step down gradually
- ▶ S.T.O.P.





# ETS

- ▶ Second hand smoke composed of smoke from a smokers lungs (mainstream) and (sidestream) smoke from the end of a cigarette
- ▶ 3,000=lung cancer from secondhand smoke/year
- ▶ 60% of all SIDS cases are tobacco related



# Types of Ads

- ▶ **“Proof Of”**– States facts. May point out a certain mg of tar as proof.
- ▶ **“Emotional”**– Appeals to emotions through glamour. Shows models or couples together smoking.
- ▶ **“Comparison”**– Companies compare products. Filter vs. non-filter, two-pack comparison
- ▶ **“Medical/Health”**– Emphasizes low tar/nicotine claiming it is a better product or there are benefits to smoking them.
- ▶ **“Bandwagon”**– Convinces consumers that everyone is using the product.
- ▶ **“Glamour”**– Famous people or glamorous situations like athletes using smokeless tobacco.

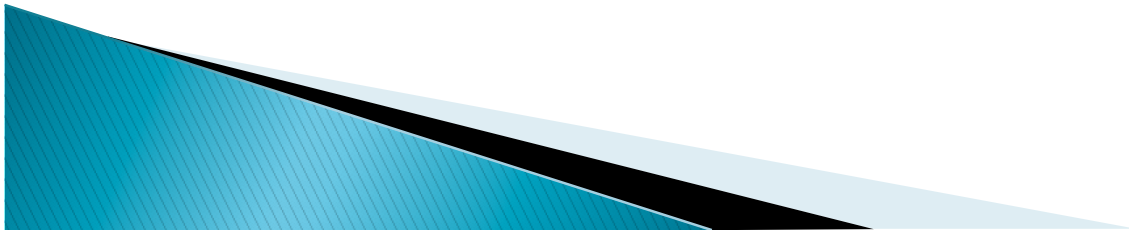


**Table A**  
**Chemicals found in hookah smoke *versus* cigarette smoke.**  
*Adapted from Shibadeb and Saleh<sup>11</sup>*

Chemical	Yield from 1 gm hookah tobacco	Yield from cigarette smoke, 1 gm tobacco	Multiple of average cigarette smoke value
"Tar," mg	802	Range: 1–27 Average: 11.2	100-fold
Nicotine, mg	2.96	Range: 0.1–2 Average: 0.77	4-fold
Carbon monoxide CO, mg	143	Range: 1–22 Average: 12.6	11-fold
PAH			
Phenanthrene, µg (co-carcinogen)	0.748	0.2 – 0.4	2.5-fold
Fluranthracene, µg (co-carcinogen)	0.221	0.009 – 0.099	4-fold
Chrysene, µg (tumor initiator)	0.112	0.004 – 0.041	5-fold

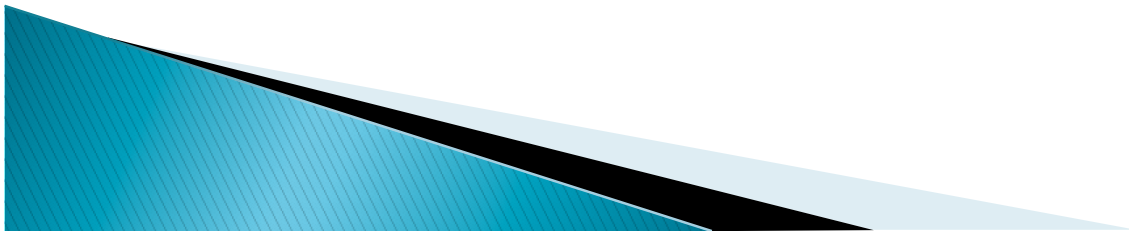
# Alcohol

- ▶ Ethanol–
  - Natural/Fermentation
- ▶ Depressant–
- ▶ Binge Drinking–































# B.A.C.

- ▶ Amount of alcohol in the blood expressed by a % (i.e. .10 means 1 / 10 of 1% of fluid in blood is alcohol)
- ▶ \_\_\_\_\_ is the BAC level for Colorado



# B.A.C. Charts

BAC	
.10	
.09	
.08	← Concentrated attention, speed control
.07	
.06	← Information processing, judgement
.05	← Coordination
.04	← Eye movement control, standing steadiness, emergency responses
.03	← Tracking and steering
.02	← Divided attention, choice reaction time, visual function
.01	

WAS YOUR BREATH TEST ACCURATE?						
Drinks	Weight in Pounds:					
	100	120	140	160	180	200
1 	.04	.03	.03	.02	.02	.02
2  	.08	.06	.05	.05	.04	.04
3   	.11	.09	.08	.07	.06	.06
4    	.15	.12	.11	.09	.08	.08
5     	.19	.16	.13	.12	.13	.09
6      	.23	.19	.16	.14	.15	.11
7       	.26	.22	.19	.16	.17	.13
Approx. Blood Alcohol Percentage						

Subtract .01% for each 40 minutes of drinking. One drink is 1 oz. of 100 proof liquor, 12 oz. of beer, or 4 oz. of table wine. Food, fatigue, medications, and other conditions may cause your blood alcohol level to be different.

# Factors that Influence Intoxication

- ▶ Type of Drink

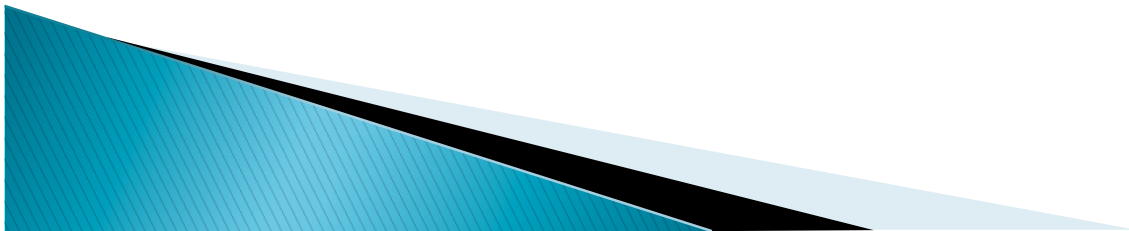
- Beer 4%, Wine 12%, Liquor 45%
- Proof–

- ▶ Amount Consumed

- Liver processes\_\_\_\_\_

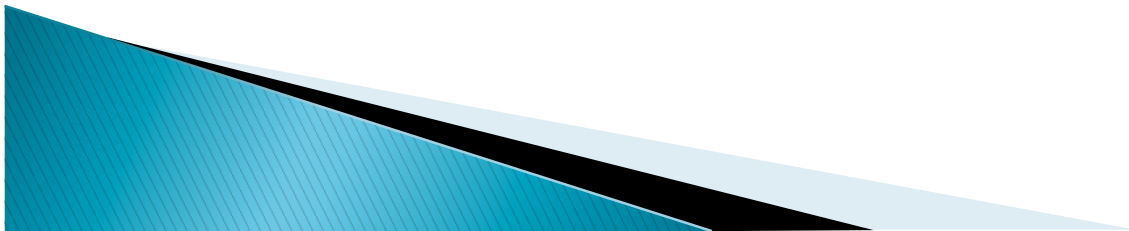
- ▶ Time Elapsed Between Drinks

- If liver can metabolize, little effect is felt



# Factors cont'd

- ▶ Body Weight
  - 200 lb man vs. 100 lb man
  - Woman vs. Men
- ▶ Stomach Contents
  - Empty vs. Full
- ▶ Previous Experience
  - Modify behaviors/ Overcompensate





# Health Triangle

▶ Physical

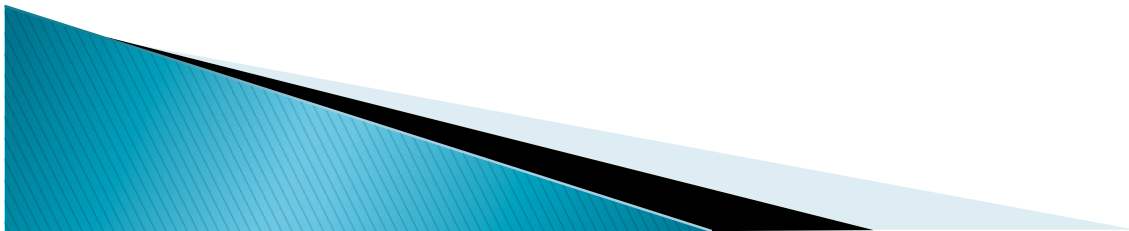
Mental

Social



# Alcoholism

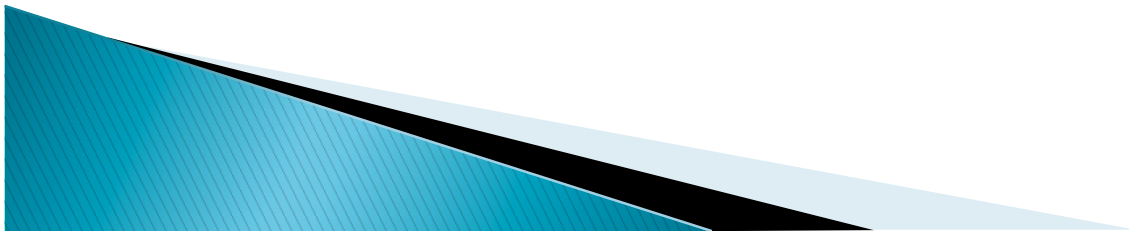
- ▶ Total dependence on alcohol (genetic?)
- ▶ -----
- ▶ 6 million adults in US have disease



# Stages of Alcoholism

## ▶ Warning Stage

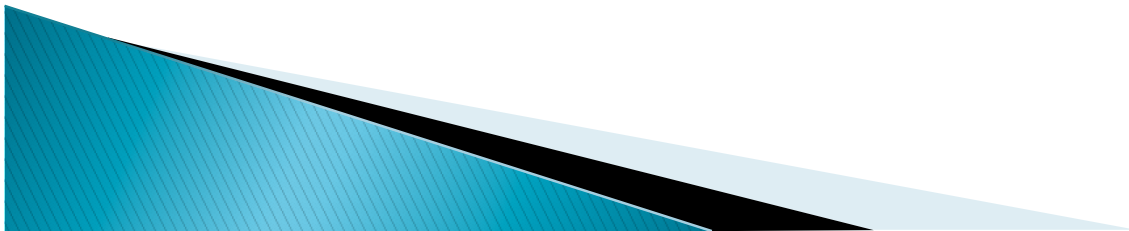
- ▶ Increased tolerance to alcohol
- ▶ Preoccupation with drinking (drink alone)
- ▶ Embarrassing behavior
- ▶ Sneaking drinks



# Stages cont'd

## ▶ Crucial Stage

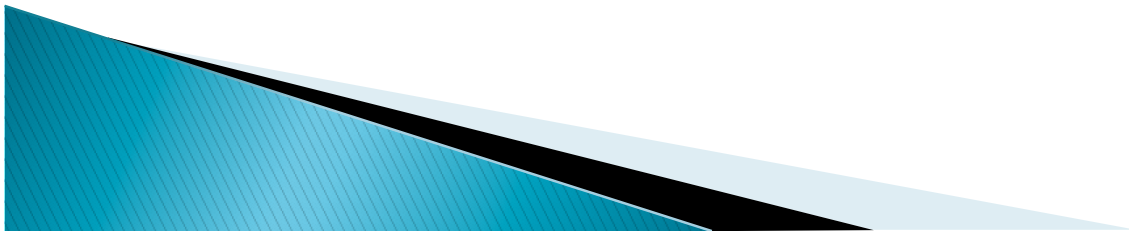
- ▶ Loss of control over how much one drinks
- ▶ Guilt feelings about drinking
- ▶ Rationalization of behavior
- ▶ Empty promises



# Stages cont'd

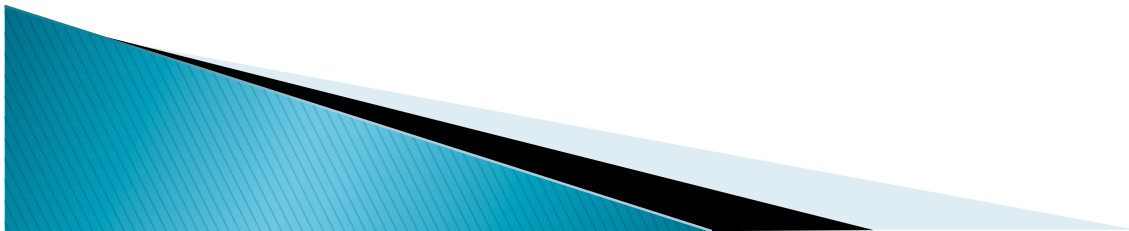
## ▶ Chronic Stage

- ▶ Total dependence
- ▶ Health consequences arise and intensify
- ▶ Continue drinking to prevent withdrawal



# Effects on the Body

- ▶ Brain
- ▶ Lungs
- ▶ Stomach



# Effects cont'd

- ▶ Liver

- ▶ Small Intestine

- ▶ Absorption occurs here

- ▶ Cardiovascular System

- ▶ Kidney

